



CONGRESSIONAL HEARING RESUME

106th Congress

Date: **22 March 00**

SUBJECT: Tactical Aviation Modernization

COMMITTEE: Senate Armed Services Committee
Subcommittee on Airland Forces

CHAIRMAN: The Honorable Rick Santorum

MEMBERS PRESENT (Bold Face):

REPUBLICANS

Rick Santorum (PA)
James Inhofe (OK)
Pat Roberts (KS)
Wayne Allard (CO)

Tim Hutchinson (AR)

DEMOCRATS

Joseph Lieberman (CT)
Max Cleland (GA)
Mary Landrieu (LA)
Jack Reed (RI)

WITNESSES: Panel

Dr. H. Lee Buchanan
Dr. Lawrence J. Delaney
Mr Phillip Coyle

Assistant Secretary of the Navy (Acquisition)
Assistant Secretary of the Air Force (Acquisition)
OSD/DOT&E

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EXECUTIVE SUMMARY

The Subcommittee convened this hearing to examine tactical aviation modernization. The hearing covered the F-18E/F, F-22 and Joint Strike Fighter programs, however the majority of the subcommittee's questions concerned the F-22. The F-22 issues were focused primarily on the F-22 test program progress, concern over test point reductions, and the EMD cost cap. The subcommittee voiced concern the test program was behind schedule and test point reduction was going to increase risk going into production. The subcommittee was also very interested in Mr Coyle's testimony that the EMD cost cap is causing the removal of content from the test program. JSF issues focused primarily on perceived requirements growth (USAF only) and potential cost increases.

The Subcommittee was called to order at 1405.

Opening Remarks

Chairman Santorum: He welcomed all of the witnesses and said the committee was going to focus on the F-18E/F, F-22 and JSF since they were all going through major milestones this year. He voiced concern on the overall affordability of the TACAIR modernization program and stated that this year alone it accounted for \$8B in funding. He formally accepted Dr Gansler's statement on the JSF acquisition strategy for the record.

Sen Lieberman: He started by addressing the "thorny issue of TAC aircraft modernization". He said they were trying to be supportive of the programs, but needed to ask the proper questions. His concern on the F-18E/F was whether its performance is worth the cost. He called the F-22 revolutionary, but was troubled by the "erosion of the test program". He indicated that the F-22 cost cap was initiated to control cost growth, but he is now concerned it may increase risk at the start of production. Finally he is troubled by the JSF requirements growth.

Witness Statements

Dr. Buchanan: He started by recapping how successful Naval aviation has been in recent history. He then went on to briefly describe the F-18E/F and JSF programs.

Dr Delaney: Opened with highlights of the successful F-22 test program. He provided updates on the flight test accomplishments, avionics test performance and affordability initiatives. He then summarized the JSF program and emphasized that the JSF requirements were stable.

Mr Coyle: Highlighted concerns on the F-18E/F and F-22 programs. He testified that F-22 test results were quite positive and the F-119 was performing well. His principle concern with the program was the lagging test program. He stated that over the last three years the program has lost 49 months and reduced test points by 13%. He went on to say that optimistic test schedules are not being met. He addressed concerns that the current test program does not include testing in actual adverse climate environments. The testing will be done in the climatic chamber. He reiterated his concerns on active fire suppression. He finished by saying that he felt that the EMD cost caps were detrimental to the F-22 program and suggested that the overall cost cap remain, but the EMD cost cap be removed.

Sen Santorum: Asked Dr Delaney to comment on Mr Coyle's concern on the cost cap.

Dr Delaney: Responded by saying that the cost cap was a very effective tool to control cost. He said that he wanted to be sure that as they approach the end of EMD, all the money available was spent on test. To accomplish this they put all the money onto one account, which is controlled by the program directors directly. He said they would finish EMD within the cost cap.

Sen Santorum: Asked Dr Delaney if he agreed with Mr Coyle's assessment.

Dr Delaney: Responded that he gets together with the contractor every month and he felt they were on target. He described how we were not getting the number of test points they wanted per month, but felt this would improve shortly. He felt that they were getting to a point in the program where major problems will decrease which will allow them to be more efficient. He explained how the test program was using air refueling and telemetry to improve efficiency. He finished by saying he shared Mr Coyle's concern, but they were progressing as planned.

Sen Santorum: Said he was out of time, but would like to come back to this question.

Sen Cleland: Emphasized that the reason for the success in Kosovo was Air Dominance. He reminded everyone that 9 CinCs signed a letter of support for the F-22 last year, and that the GAO had not thrown rocks at the F-22 this year.

Sen Allard: Asked Dr Delaney for comments of the GAO report recommendation for an intentional delay of the JSF EMD program.

Dr Buchanan: Jumped in and said he thought the technologies were mature enough to go to EMD, but they had not yet been integrated which is exactly what EMD is for. He emphasized that the USMC does not have an option to delay because of their aging Harrier fleet.

Dr Delaney: Emphasized that the structure of the JSF program was to mature technology and demonstrate only certain areas in the concept demonstrator aircraft. The other technologies are being demonstrated on other platforms like the F-16 and F-18. He finished by saying the program was right on target and would be ready to enter EMD.

Sen Lieberman: Brought the subject back to F-22 testing. He said that some people in the AF explain that the reduction in test points is due to test efficiency, yet at the same time the test efficiencies (test points per sortie) are lagging.

Dr Delaney: Explained that recent problems such as the flaperon issue have caused some inefficiencies. These inefficiencies occur because on these flights we have to collect test data to prove we have fixed the problem, but this data does not count toward the test point accomplishment. He finished by saying he was confident they would be getting the test point efficiencies to 15 points per sortie.

Sen Lieberman: Asked if the experience to date should cause concern.

Dr Delaney: Replied no because they have management reserve to handle additional problems.

Sen Lieberman: Asked if the reduction in testing would cause an increase in risk as the program gets ready for production.

Dr Delaney: Replied that flight testing sits on top of a pyramid of other testing that supports it. He continued that they were seeing good results in modeling.

Sen Lieberman: Asked Mr Coyle to comment on the increased risk.

Mr Coyle: He said the GAO report was correct and if they were to reassess today it would actually look worse.

Sen Santorum: Asked Dr Delaney how much the program would have in reserve if they did not reduce the test hours. He stated the subcommittee has some concerns whether the program could be completed within the cost caps. He said last year the USAF testified that they had turned the corner and we were saying the same thing this year. He requested evidence that this was happening.

Dr Delaney: Referred to a cost and schedule variance chart as he discussed schedule, cost and the Boeing strike. He stated that things must be managed, but we have adequate reserves to meet the Congressional requirements.

Sen Santorum: Asked Dr Delaney what would happen if they did not meet the requirements.

Dr Delaney: He responded that the only requirement at risk was flying the 3.0 software. He continued to explain that the 40% of fatigue testing was merely a goal not a requirement.

Sen Santorum: Asked Mr Coyle if he agreed.

Mr Coyle: He agreed that the static and fatigue testing were being delayed. He said his concern is not when the tests are started, but when they are finished.

Sen Lieberman: Stated that the JROC has approved the final requirements. He said they had some concerns over the process for increasing range and g. He referred to Gen Ralston's comments on a \$28M JSF and asked what the current estimates were for the JROC JSF.

Dr Delaney: He stated that the \$28M is an objective that was set very early stage of the program. He said the current estimate is that it will be very challenging to reach this number. When prompted for specific numbers by Sen Lieberman, Dr Delaney responded in the neighborhood of \$1-2M. Dr Delaney said \$300K-\$400K of that is attributed to the increase in g.

Dr Buchanan: He responded that the USN and USMC have had no cost or requirements increase.

Sen Santorum: Thanked the witnesses.